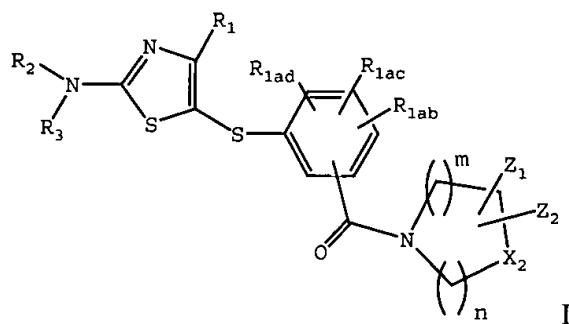


7. (Twice Amended) A compound of formula I



diastereomers, enantiomers or salts thereof

where

R_1 , R_{1ab} , R_{1ac} and R_{1ad} are independently

- (1) hydrogen or R_6 ,
- (2) $-OH$ or $-OR_6$,
- (3) $-SH$ or $-SR_6$,
- (4) $-C(O)_qH$, $-C(O)_qR_6$, or $-O-C(O)_qR_6$, where q is 1 or 2,
- (5) $-SO_3H$ or $-S(O)_qR_6$,
- (6) halo,
- (7) cyano,
- (8) nitro,
- (9) $-Z_4-NR_7R_8$,
- (10) $-Z_4-N(R_9)-Z_5-NR_{10}R_{11}$,
- (11) $-Z_4-N(R_{12})-Z_5-R_6$, or
- (12) $-P(O)(OR_6)_2$;

R_2 and R_3 are each independently H, $-Z_4-R_{6a}$, or $-Z_4-NR_{7a}R_{8a}$;

R_6 , R_{6a} , and R_{6b} are independently alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, aryl, aralkyl, heterocyclo, or heterocycloalkyl, each of which is unsubstituted or substituted with Z_1 , Z_2 and one or more groups Z_3 ,

R_{7a} , R_{8a} , R_9 , R_{10} , R_{11} and R_{12}

- (1) are each independently hydrogen, or $-Z_4R_{6b}$; or
- (2) R_{7a} and R_{8a} may together be alkylene, alkenylene, or heteroalkylene, completing a 3- to 8-membered saturated or unsaturated ring with the nitrogen atom to which they are attached, which ring is unsubstituted or substituted with Z_1 , Z_2 and one or more groups Z_3 , or

(3) any two of R_9 , R_{10} and R_{11} may together be alkylene, alkenylene or heteroalkylene completing a 3- to 8-membered saturated or unsaturated ring together with the nitrogen atoms to which they are attached, which ring is unsubstituted or substituted with one or more Z_1 , Z_2 and Z_3 ;

X_2 is CZ_{3a} , NZ_{3a} , O or S;

Z_{3a} is H, hydroxy, optionally substituted alkyl, optionally substituted heterocyclo, optionally substituted aryl, optionally substituted aralkyl, $-OZ_6$, $-C(O)_qH$, $-C(O)_qZ_{6a}$, $-Z_4-NZ_7Z_8$, or $-Z_4-N(Z_{10})-Z_5-Z_6$;

n is 1 to 3;

m is zero to 2;

Z_1 , Z_2 and Z_3 are each independently

- (1) hydrogen or Z_6 ,
- (2) $-OH$ or $-OZ_6$,
- (3) $-SH$ or $-SZ_6$,
- (4) $-C(O)_qH$, $-C(O)_qZ_6$, or $-O-C(O)_qZ_6$,
- (5) $-SO_3H$, $-S(O)_qZ_6$, or $S(O)_qN(Z_9)Z_6$,
- (6) halo,
- (7) cyano,
- (8) nitro,
- (9) $-Z_4-NZ_7Z_8$,
- (10) $-Z_4-N(Z_9)-Z_5-NZ_7Z_8$,
- (11) $-Z_4-N(Z_{10})-Z_5-Z_6$,
- (12) $-Z_4-N(Z_{10})-Z_5-H$,
- (13) oxo,
- (14) any two of Z_1 , Z_2 , and Z_3 on a given substituent may together be alkylene or alkenylene completing a 3- to 8-membered saturated or unsaturated ring together with the atoms to which they are attached; or
- (15) any two of Z_1 , Z_2 , and Z_3 on a given substituent may together be $-O-(CH_2)_q-O-$;

Z_4 and Z_5 are each independently

- (1) a single bond,
- (2) $-Z_{11}-S(O)_q-Z_{12}-$,
- (3) $-Z_{11}-C(O)-Z_{12}-$,
- (4) $-Z_{11}-C(S)-Z_{12}-$,
- (5) $-Z_{11}-O-Z_{12}-$,
- (6) $-Z_{11}-S-Z_{12}-$,
- (7) $-Z_{11}-O-C(O)-Z_{12}-$,

(8) $-Z_{11}-C(O)-O-Z_{12}-$; or

(9) alkyl

Z_6 and Z_{6a} are independently

- (i) alkyl, hydroxyalkyl, alkoxyalkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, aryl, aralkyl, alkylaryl, cycloalkylaryl, heterocyclo, or heterocycloalkyl;
- (ii) a group (i) which is itself substituted by one or more of the same or different groups (i); or
- (iii) a group (i) or (ii) which is independently substituted by one or more of the groups (2) to (15) of the definition of Z_1 ;

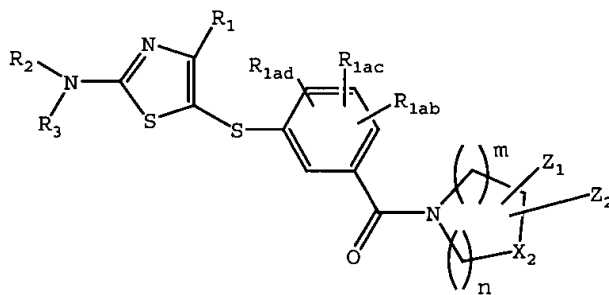
Z_7 , Z_8 , Z_9 and Z_{10}

- (1) are each independently hydrogen or $-Z_4-Z_{6a}$;
- (2) Z_7 and Z_8 may together be alkylene, alkenylene, or heteroalkylene completing a 3- to 8-membered saturated or unsaturated ring together with the atoms to which they are attached, which ring is unsubstituted or substituted with one or more Z_1 , Z_2 and Z_3 , or
- (3) Z_7 or Z_8 , together with Z_9 , may be alkylene, alkenylene, or heteroalkylene completing a 3- to 8-membered saturated or unsaturated ring together with the nitrogen atoms to which they are attached, which ring is unsubstituted or substituted with one or more Z_1 , Z_2 and Z_3 ;

Z_{11} and Z_{12} are each independently

- (1) a single bond,
- (2) alkylene,
- (3) alkenylene, or
- (4) alkynylene;

8. (Amended) A compound of claim 7 having the formula



10. (Amended) A compound of claim 9 wherein R_{1ab} , R_{1ac} and R_{1ad} are independently H, alkyl, hydroxy, nitro, halo, $-OR_6$, $-NR_7R_8$, $-C(O)_qH$ or $-C(O)_qR_6$.

12. (Amended) A compound of claim 8 having the following formula